CLAIMS

What is claimed is:

1. An isolated TSPAN-7 inhibitor wherein said TSPAN-7 inhibitor is selected from the group consisting of an antisense molecule, an antibody, a ribozyme, a peptide, a peptide mimetic, and a cyclic peptide.

2. The isolated TSPAN-7 inhibitor of claim 1 wherein said antisense molecule or the complement thereof comprises an oligonucleotide selected from the group consisting of at least 10, at least 16, at least 20, and at least 25 consecutive nucleotides of the sequence of SEQ ID NO:1.

3. The isolated TSPAN-7 inhibitor of claim 1 wherein said antisense molecule or the complement thereof hybridizes under high stringency conditions to the sequence of SEQ ID NO:1.

4. The isolated TSPAN-7 inhibitor of claim 1 wherein said antisense molecule comprises a nucleic acid sequence selected from the group consisting of SEQ ID NO:3-7.

5. An isolated TSPAN-7 inhibitor wherein said TSPAN-7 inhibitor is a ribozyme.

6. The isolated TSPAN-7 inhibitor of claim 1, wherein said inhibitor is an antibody selected from the group consisting of a monoclonal antibody, a polyclonal antibody, a humanized antibody, a human antibody, an antibody fragment, a bispecific antibody, and a trispecific antibody.

7. The isolated TSPAN-7 inhibitor of claim 6, wherein said antibody fragment is selected from the group consisting of a $F(ab')_2$ and a single chain Fv fragment.

8. A method of decreasing the expression of TSPAN-7 in a mammalian cell, comprising administering to said cell a TSPAN-7 inhibitor of claim 1.

9. The method of claim 6 wherein said TSPAN-7 inhibitor is an antisense molecule comprising an oligonucleotide selected from the group consisting of at least 10, at least 16, at least 20, and at least 25 consecutive nucleic acids of the sequence of SEQ ID NO:1.

10. A method of treating hyperproliferative disorder, comprising administering to a mammalian cell a TSPAN-7 inhibitor such that said hyperproliferative disorder is reduced in severity.

11. The method of claim 8 wherein said hyperproliferative disorder is cancer.

12. A method of making a recombinant vector comprising inserting an oligonucleotide selected from the group consisting of at least 10, at least 16, at least 20, and at least 25 consecutive nucleotides of SEQ ID NO:1, or the complement thereof, into a vector in operable linkage to a promoter.

13. A recombinant vector produced by the method of claim 12.

14. A method of making a recombinant host cell comprising introducing the recombinant vector of claim 13 into a host cell.

15. A recombinant host cell produced by the method of claim 14.

16. A recombinant method of producing a polypeptide, comprising culturing the recombinant host cell of claim 15 under conditions such that said polypeptide is expressed and recovering said polypeptide.

17. An epitope-bearing portion of the polypeptide of SEQ ID NO:2.

18. The epitope-bearing portion of claim 17, which comprises about 8 to about 25 contiguous amino acids of any one of SEQ ID NO:2, SEQ ID NO:13 and SEQ ID NO:14.

19. The epitope-bearing portion of claim 17, which comprises about 10 to about 15 contiguous amino acids of SEQ ID NO:2, SEQ ID NO:13 and SEQ ID NO:14.

20. An isolated antibody that binds specifically to a polypeptide comprising amino acids at least 95% identical to a polypeptide comprising amino acids from about 1 to about 270 of SEQ ID NO:2.

21. An isolated antibody that binds specifically to an isolated polypeptide wherein, except for at least one conservative amino acid substitution, said polypeptide has an amino acid sequence selected from the group consisting of:

(a) amino acids from about 1 to about 270 of SEQ ID NO:2; and

(b) amino acids from about 2 to about 270 of SEQ ID NO:2.

22. An isolated antibody that binds specifically to a polypeptide comprising the epitope-bearing portion of claim 17.

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